

## **REMARKS**

Claims 1-27 remain in this application. Claim 28 was previously canceled. No claims are presently or have previously been withdrawn. Claims 1, 2, 4, 6-19, 22, and 25-27 are currently amended.

### **I. CLAIM REJECTIONS – 35 USC § 112**

The examiner rejected claims 1-27 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the examiner asserted that the claims contained reference to round helically-toothed gear wheels and that there is insufficient support in the originally filed specification and drawings to support round helically-toothed gearwheels.

Despite FIG. 1 clearly showing support for round helically-toothed gearwheels, the applicant amends the claims to remove the requirement that the gearwheels be round. The applicant therefore respectfully submits that the claims are supported by the originally filed application and requests that the examiner withdraw the rejection of the claims.

### **II. CLAIM REJECTIONS - 35 U.S.C. § 103**

#### **A. Claims 1-7, 11, 13-15, 17-23, and 25-27**

The examiner rejected claims 1-7, 11, 13-15, 17-23, and 25-27 under 35 U.S.C. § 103(a) as being unpatentable over McCormick, et al. (U.S. Patent No. 6,585,246) ("McCormick") in view of Howell (U.S. Patent No. 3,481,215) ("Howell").

The applicant respectfully submits that claims 1-7, 11, 13-15, 17-23, and 25-28 are not obvious because the examiner has not provided any objectively supported evidence of motivation for combination needed for a *prima facie* showing of obviousness. In rejecting claims 1-7, 11, 13-15, 17-23, and 25-27, the examiner asserts that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to create the first and second gear of McCormick as a double helical gear having self-locking characteristics as taught by Howell to prevent overshoot of the output and to provide almost perfect damping characteristics."<sup>1</sup> However, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.<sup>2</sup>

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<sup>1</sup> Final Office Action dated July 20, 2007, p. 3.

<sup>2</sup> *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

One of ordinary skill in the art would not have been motivated to modify McCormick because McCormick specifically teaches away from the suggested modification. Specifically, the suggested modification would be unnecessary and redundant to the features already incorporated in the McCormick design and thus would be wasteful over-engineering and remove the benefits of scalability specifically advocated by McCormick. The examiner indicates that the rejection is directed only to the embodiment of FIG. 1. However, as just stated, a prior art reference must be considered in its entirety. Even if just considering the clamp in FIG. 1 though, McCormick teaches that the clamp in FIG. 1 is specifically designed to only clamp small items, such as an electronic circuit board. The clamp in FIG. 1 therefore only uses small clamp arms having low rotational inertia and/or insignificant weight. Movement of the small clamp arms would therefore not involve any inertia that would cause the clamp to move toward the clamped or unclamped position even though no power is applied. There would also not be any issues concerning servomechanism overshoot or trying to perfect damping characteristics. Even if these issues were a concern, the clamp in FIG. 1 also includes a built-in computer that monitors and controls the clamp and that includes timers, counters, input and output portals, memory modules, and programmable instructions to regulate motion algorithms, error recovery, status messaging, test display, limit adjustment, and pushbutton control. The computer controlling the clamp thus provides ample control for operation of the clamp to correct for any overshoot that would occur with the small clamp arms. Modifying McCormick with a more complex design as proposed would thus increase the complexity, and the cost of manufacture and servicing, of the clamp in FIG. 1 just to "improve" the clamp where there was no need for improvement. One of ordinary skill in the art would thus have considered such a modification to be over-engineering and would not have considered the proposed combination obvious. The applicant therefore respectfully submits that there is no motivation to modify McCormick as the examiner suggests.

Additionally, when properly considering McCormick as a whole, McCormick specifically teaches away from the examiner's suggested over-engineering by teaching the scalability capability with the optional add-on brake shown in FIG. 2. The examiner attempts to only focus on the embodiment in FIG. 1. However, McCormick teaches that FIG. 2 shows the clamp embodiment of FIG. 1 with the addition of an optional brake when used with heavier clamp arms. Thus FIG. 2 is a related embodiment and must be considered. As

discussed regarding FIG. 2, McCormick teaches away from the examiner's suggestion by teaching the desirability to start with a stock model (as shown in FIG. 1) for light use that may be modified on an as needed basis. This allows greater flexibility in implementation of the clamp for varying jobs. One of ordinary skill in the art would have considered the ability to scale the clamp to demands of the particular application to be beneficial for keeping manufacturing costs down because the stock clamp with the optional brake as an add-on is cheaper to produce than producing two completely different models. McCormick therefore teaches away from including braking as a built-in, full-time feature into the main gearing system itself as this would be over-engineering and add cost, not to mention being unnecessary for the applications the clamp in FIG. 1 is designed to perform. Modifying McCormick as the examiner suggests thus amounts to impermissible hindsight afforded by the claimed invention. The applicant therefore respectfully submits that there is no motivation to modify McCormick as the examiner suggests.

Additionally, the applicant respectfully submits that McCormick and Howell are not proper references for an obviousness rejection because the references non-analogous to the art of blowout preventer actuation. To rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.<sup>3</sup> McCormick is directed to a power clamp for holding objects while Howell is directed to double helical gears. Even further, a power clamp is not analogous to a workpiece machine. The claimed invention is directed to an actuator for the linear regulation of an actuating element for use in a blowout preventer. McCormick and Howell are clearly in different fields of endeavor that involve different structures for different purposes. Also, McCormick and Howell are not reasonably pertinent to the problem of blowout preventer actuation because a person of ordinary skill in the art would not reasonably have been motivated to look for or have expected to solve the problem by considering a reference dealing with an electric clamp. The examiner attempts to ignore this aspect by asserting that "intended use" is not pertinent to differentiate a claimed apparatus from prior art. However, the examiner is misapplying the standard for differentiating a reference to the standard of

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<sup>3</sup> *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992); *In re Deminski*, 796 F.2d 436 (Fed. Cir. 1986); *Wang Laboratories Inc. v. Toshiba Corp.*, 993 F.2d 858 (Fed. Cir. 1993).

whether the reference should be considered in the first place. The proper obviousness analysis requires the cited art to be in the applicant's field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned before the art is to be considered at all. Thus it would not be obvious to combine McCormick and Howell to teach the claimed invention because the references are non-analogous to the art of blowout preventer actuation.

For at least these reasons, the applicant respectfully submits that claims 1-7, 11, 13-15, 17-23, and 25-27 are not obvious over the proposed combination of McCormick and Howell and requests that the examiner withdraw the rejection.

#### **B. Claims 8-10, 12, 16, and 24**

The examiner rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of Howell, and further in view of Waber (U.S. Patent No. 6,095,487). The examiner rejected claims 9-10 and 24 under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of Howell, and further in view of Allen (U.S. Patent No. 5,722,304). The examiner rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of Howell, and further in view of Coppola, et al. (U.S. Patent No. 5,743,348). The examiner rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of Howell, and further in view of Gilges, et al. (U.S. Patent No. 5,370,011).

Claims 8-10, 12, 16, and 24 all depend either directly or indirectly from allowable claim 1. The applicant incorporates the remarks made above regarding allowable claim 1. For at least these reasons, the applicant respectfully submits that claims 8-10, 12, 16, and 24 are also allowable over the cited references.

#### **III. STATEMENT REGARDING CLAIMS**

The applicant comments on the allowability of the claims by addressing the examiner's comments in this paper as well as previously during the prosecution of this application. By doing so, the applicant is in no way limiting its ability to identify additional points of novelty regarding the independent claims or dependent claims at a later date.

#### **CONCLUSION**

The applicant respectfully requests reconsideration the pending claims and that a timely Notice of Allowance be issued in this case. If the examiner feels that a telephone

conference would expedite the resolution of this case, the examiner is invited to contact the undersigned.

In the course of the foregoing discussions, the applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. There may also be other distinctions between the claims and the prior art that have yet to be raised, but that may be raised in the future.

Unless the applicant has specifically stated that an amendment was made to distinguish the prior art, it was the intent of the amendment to further clarify and better define the claimed invention and the amendment was not for the purpose of patentability. Further, although the applicant may have amended certain claims, the applicant has not abandoned its pursuit of obtaining the allowance of these claims as originally filed and reserves, without prejudice, the right to pursue these claims in a continuing application.

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a). If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley Rose, P.C. Deposit Account Number 03-2769 (ref. 1600-11400) of Conley Rose, P.C., Houston, Texas.

Respectfully submitted,  
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